2004 Operations Workshop

First Responder

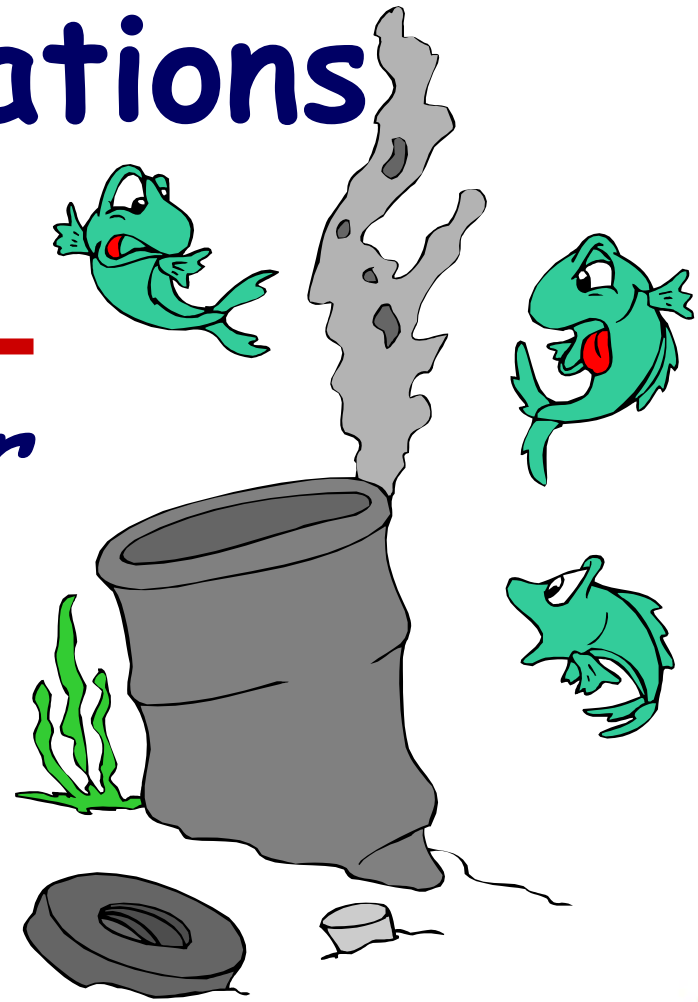
Interactive Sea Story

Optional:

Information Systems Update

2004 Operations Workshop

First Responder



Our Situation Today

- **Activity on our waterfronts has increased and is continuing to grow.**
- **The probability that our national resources may be fouled has increased.**
- **The responsibility to prevent or respond falls within the jurisdiction of the US Coast Guard.**

First Responder

- Operational vessels patrol areas frequented by both pleasure and commercial vessels.
- We have a reasonable chance of being a First Responder.
- We will report as much data as we can to the Coast Guard (or the appropriate authority) about the incident.

Learning Objectives

- Identify the roles and responsibilities of a First Responder.
- Define the types of pollutants, where they originate from and how to identify them.
- Explain the nature of a hazardous pollutant and how to respond.

Section 1:
What is a First Responder?

- **What is a First Responder?**

A First Responder is…

One who is likely to witness or discover a pollutant being introduced into the environment.

Pollutants

- **What is a Pollutant?**

A Pollutant Is…

Something that is introduced to the environment which is not indigenous to the environment.

Just Remember…

There is a defined procedure in place to deal with a pollution incident from discovery to resolution.

Levels of Response

Level	Function
Awareness	Recognize potential problems from a safe distance Notify the Coast Guard (or local authorities) Standby at a safe distance, keeping other boaters out of harm's way
Operations	All of the functions of the Awareness level, plus… Contain pollutant
Technician	Trained to stop release
Specialist	Responds with the support technician Trained in the specific substance
Incident Cmdr.	Assumes command at the incident scene

Levels of Response

- **At what level of response is an Auxiliarist expected to act?**

Section 2: Pollutants

- **What types of pollutants would an Auxiliarist be apt to encounter while on patrol?**

Pollutant Sources

- **Pollutants may enter the environment from a:**
  - Point Source: A specific point or source easy to identify, monitor and regulate
  - Non-Point Source: A wide variety of sources unconstrained in movement (e.g. storm run-off)

Pollutants

- **Where might these pollutants come from?**
- **How would they harm the environment or humanity?**

Pollutant Detection

Pollutant	Source	Harmful Effects	Detection
Human waste	Illegal boat discharge Sewage plant failure	Bacteria infiltration (E coli) Esthetic appeal	Odor Visual Chemical analysis
Oil/Gasoline	Oil spill Illegal discharge Fire hazard	Death of flora and fauna Noxious, slippery coating Disruption of the bottom ecology	Sheen on the water Odor Burning eyes Burning nose
Algal bloom	Run-off from land	Large growth of certain organisms Depleting food and oxygen Large die-off off of certain species	Odor Visual Chemical analysis
Flotsam	Vessel, dock and/or pier wreckage	Hazard to navigation	Visual
Exotic species	Illegal dumping of ballast tanks	Disrupt the ecology of the area	Visual
Hazardous	Illegal spillage or leakage of discharge	Unreasonable risk to health, safety and property	Visual Burning eyes Burning nose

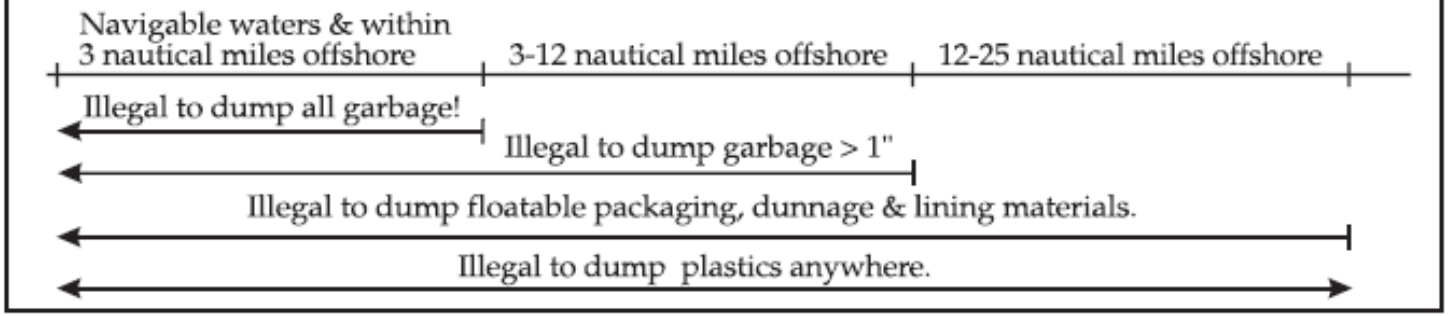
MARPOL

MARPOL Garbage Dumping Restrictions

Under U.S. Federal law, it is illegal to discharge plastic or garbage mixed with plastic into any waters. Regional, state or local regulations may also apply. All discharge of garbage is prohibited in the Great Lakes and their connecting or tributary waters.

Violators are subject to a civil penalty of up to $25,000, a fine of up to $500,000, and 6 years imprisonment.

Open Ocean Restrictions



Report marine pollution incidents to the National Response Center at 1-800-424-8802 or to your local Coast Guard office by phone or VHF radio, channel 16.

Keep our nation's waterways clean-it's the law!

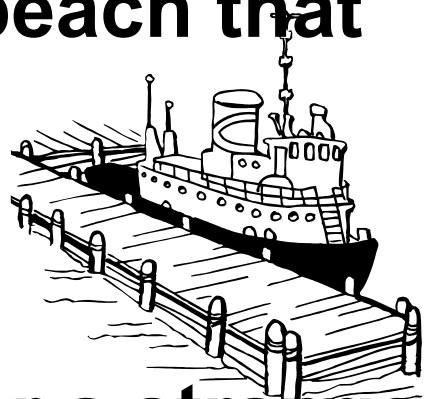
What Do I Look For?

- Oil in the water, booms or clean-up equipment
- Calmer areas on the water (oil on the water reduces wave action)
- Unusual water fowl activity which might indicate foreign substance/fish kills in the water
- A wrecked or beached vessel

What Do I Look For?

continued

- Dark streaks on the side of a vessel that may indicate a recent spill over the side
- Unusual activity on the deck of a vessel, on a pier or on a beach that may indicate a spill
- A vessel listing deeper than the load line
- Vapor clouds or smoke (or a strange or unusual odor)



What Do I Look For?

continued

- **Overboard discharge from a vessel or discoloration in the water**
- **Unblanked hoses or manifold on a water front facility pier**
- **Runoff from storm sewers, banks and shorelines after rainfall**

Pollutants

- **What other kinds of things should you be looking for while on patrol?**
- **What do you think you should do if you come upon a spill?**

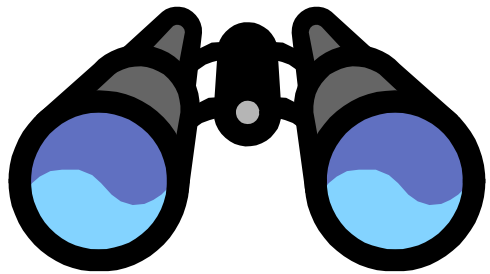
What Can I SAFELY Report?

- Location of the incident
- Body of water affected or threatened
- Material spilled, if known
- Estimate of quantity spilled
- Size of slick or sheen
- Source of the discharge
- Actions being taken on scene, if any

SAFELY Evaluate A Spill

***ALWAYS be*:**

- **Positioned upwind of the spill**
- **A fair distance away**
- **Using binoculars**



Section 3: Hazardous Material

- **What is a hazardous material?**

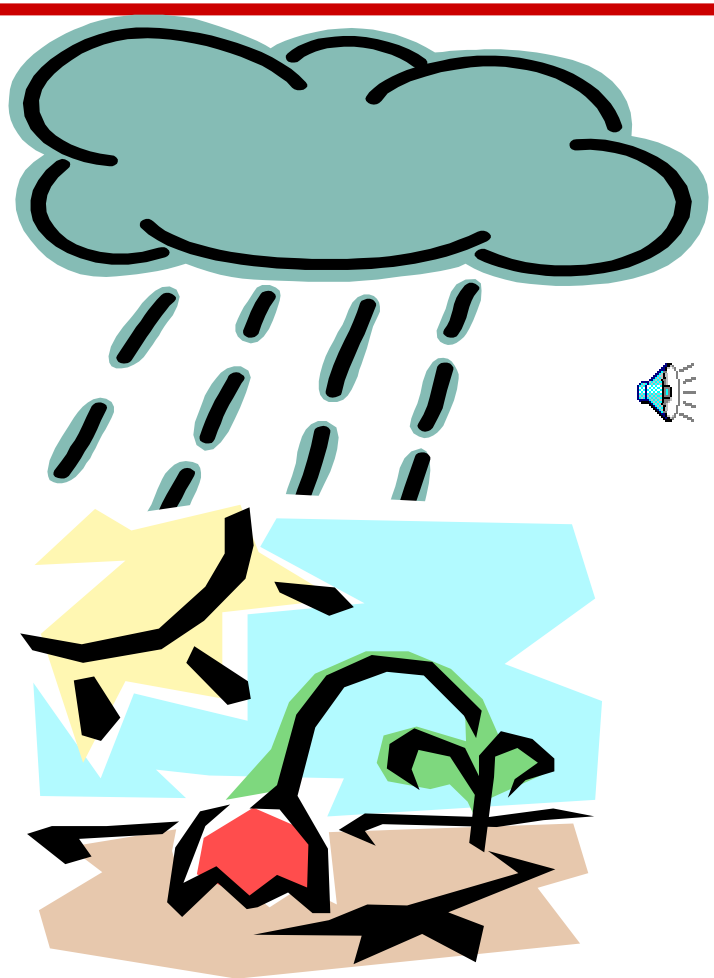
Hazardous Material

A hazardous material is a substance or material capable of posing an unreasonable risk to health, safety and property.

Site Hazards

- Fire hazard
- Biological
- Explosive dangers (improper storage, etc.)
- Radiation
- Unstable debris
- Leaks

Environmental Hazards



- Storms
- Droughts

Your Approach

- **How would you approach a potentially hazardous incident?**

Coxswain & Crew

The coxswain and the crew must maintain <u>situational awareness</u> at all times.

This means being <u>alert and aware</u> of your surroundings and small changes that may indicate a shift in the situation.

Identifying Hazardous Materials

- **What are some ways we might use to determine what the hazardous material is?**

  (e.g. acid or base, flammable or explosive, etc.)

Recognizing Signs & Placards

Class 1: Explosive 49 CFR (HM181)

EXPLA*

*Reference 49CFR/ICAO/IATA for additional combinations

Class 2: Gases

LPHMP4

LPHMP6

LPHMP6TG

LPHMP5

LPHMP2IH

Recognizing Signs & Placards,

continued

Class 3: Flammable Liquids

LPHM3

Class 4: Flammable Solids

LPHMP4SCM

LPHMP11

LPHMPWRM

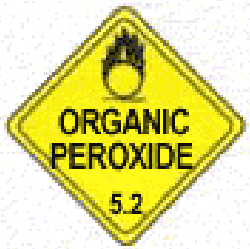
Recognizing Signs & Placards,

continued

Class 5: Oxidizer & Organic Peroxide

LPHMP12

LPHMP13



Class 6: Poisonous & Infectious Substances

LPHMP6T

LPHMP6H

LPHMP6IH

Recognizing Signs & Placards,

continued

Class 7: Radioactive

LPHMP15

Class 8: Corrosive

Class 8: Corrosive

LPHMP16

Class 9: Miscellaneous Dangerous Goods

CLASS9P

A Word of Caution!

- **Do not attempt to intervene except to quickly alert the authorities.**

- **Do not put yourself or your crew in any danger!**

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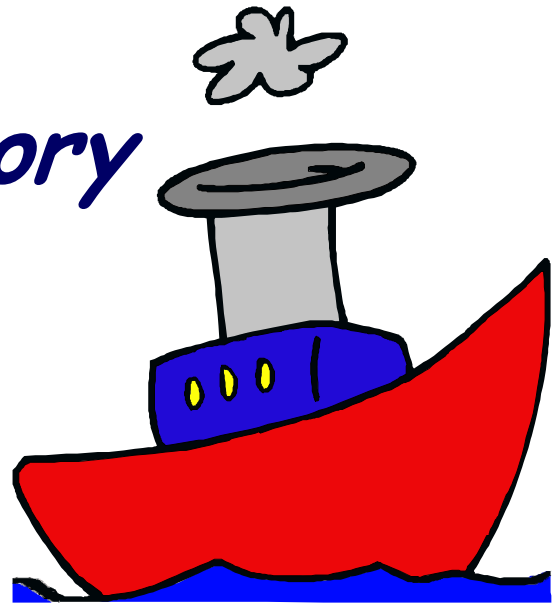
Interactive Sea Story



Learning Objective

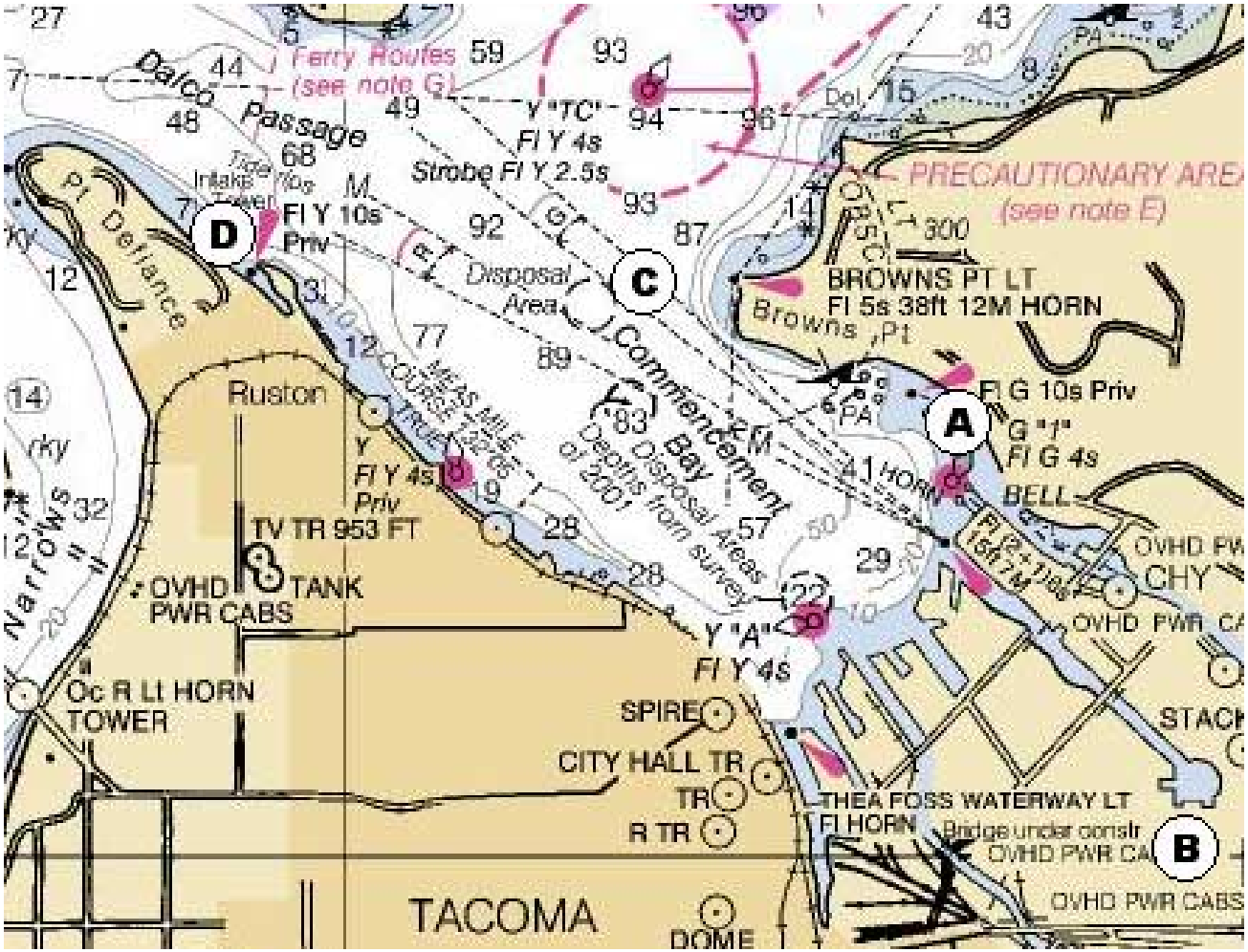
- **Review Team Coordination concepts in an interactive sea story.**

This is a fictitious account of an Auxiliary crew on a multi-mission patrol. Although set in the Port of Tacoma (D13), this case does not reflect individuals or facilities from that area.

Interactive Sea Story

Photo of similar vessel

Chart of the Mission Area



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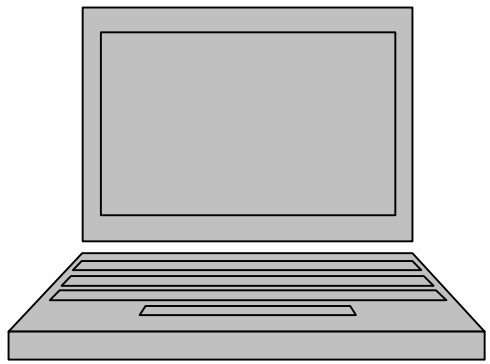
Information Systems Update

Optional Module



Learning Objective

- **Explain how to complete the required operational forms.**